APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,930	06/21/2001	Michael E. See	41711/SAH/X2	8292

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ALCATEL INTERNETWORKING SYSTEM, INC.
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EXAMINER
WU, ALLEN S

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/886,930	SEE ET AL.
	Examiner	**Art Unit**	
	Allen S. Wu	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _29 September 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-160_ is/are pending in the application.

    4a) Of the above claim(s) _1-127_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _128-160_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _21 June 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _6-7 and 11_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

2.   Claims 129, 132, 142, and 156 rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

3.   Claim 129 recites the limitation "the notification information" in last line of claim.

There is insufficient antecedent basis for this limitation in the claim.

4.   Claim 132 recites the limitation "the second notification information" in last line of

claim. There is insufficient antecedent basis for this limitation in the claim.

5.   Claim 142 recites the limitation "the notification information" in last line of claim.

There is insufficient antecedent basis for this limitation in the claim.

6.   Claim 147 recites the limitation "the second notification information" in last line of

claim. There is insufficient antecedent basis for this limitation in the claim.

7.   Claim 147 recites the limitation "the user" in line 4 of claim. There is insufficient

antecedent basis for this limitation in the claim.

8.   Claim 148 recites the limitation "the user" in last line of claim. There is

insufficient antecedent basis for this limitation in the claim.

9.   Claim 149 recites the limitation "the user" in second line of claim. There is

insufficient antecedent basis for this limitation in the claim.

10.   Claim 150 recites the limitation "the user" in second line of claim. There is

insufficient antecedent basis for this limitation in the claim.

11.   Claim 153 recites the limitation "same packet" in last line of claim. There is

insufficient antecedent basis for this limitation in the claim.

Double Patenting

12.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*,
418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be
used to overcome an actual or provisional rejection based on a nonstatutory double
patenting ground provided the conflicting application or patent is shown to be commonly
owned with this application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

13.   Claims 128-130, 132, 142-143, 145, 147 and 158 are rejected under the judicially

created doctrine of obviousness-type double patenting as being unpatentable over claim

17 of U.S. Patent No. 6,339,830 in view of Alexander et al, US Patent 6,212,191.

        As per claim 128, the Patent teaches the limitations of a user

authentication method for a communication network having a plurality of nodes,

the method comprising: entering on a first node first user identification

information; transmitting to an authentication agent on a second node

communicating with the first node over a LAN link the first user identification

information; relaying from the authentication agent to an authentication server the first user identification information; comparing on the authentication server the first user identification information with user identification information in a database of user identification information; and transmitting from the authentication server to the authentication agent, if the first user identification information matches user identification information in the database of user identification information, information notifying the authentication agent that a user on the first node has been authenticated whereupon the authentication agent authorizes transmission on the second node of packets in data flows involving the first node (claim 17, col 13 ln 66-67 and col 14 ln 1-20).

The Patent does not teach a MAC-based authentication flow between an authentication client on the first node and the authentication agent. Alexander et al discloses a MAC data flow (layer 2 protocol... Medium Access Connection, col 1 ln 19-66). One of ordinary skill in the art at the time of the applicant's invention would have been able to modify the authentication data flow to include a MAC data flow between the client and agent. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Alexander et al within the claims of the Patent so that the authentication flow can be used with applications residing on a layer 2 protocol such as MAC.

As per claim 129, the combination of the Patent and Alexander et al teaches the stated limitations as described above. The Patent does not state the limitation of relaying from the authentication agent to the authentication client. Alexander et al discloses relaying notification information to from an authentication server to an authentication client (LE_JOIN_RESPONSE, col 2 ln 26-60). One of ordinary skill in the art would have been able to modify the communication network to further relay notification information to the client. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Alexander et al within the limitations of the Patent because it would have improved security of the system by providing further information to the client.

As per claim 130 and 145, the combination of the Patent and Alexander et al teaches the stated limitations as described above. The Patent does not further claim the limitation of transmitting a request to establish an authentication session prior to transmitting the first user identification information. The office takes official notice that transmitting a request to establish an authentication session is well known in the art. One of ordinary skill in the art at the time of the applicant's invention would have been able to modify the communication network to have the client initiate an authentication session. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the client to first transmit a request to establish an authentication session because it

would have improved security by allowing the client to protect his identification

information.

As per claim 132 and 147, the Patent does state the limitation of second

notification information. Alexander et al discloses sending the client a response

notifying the status of the authentication. One of ordinary skill in the art at the

time of the applicant's invention would have realized a modification of sending a

response back to the client on the status of the authentication procedure. It

would have been obvious to one of ordinary skill in the art at the time of the

applicant's invention to combine the teachings of Alexander et al within the

combination of the Patent because it would have increased convenience by

providing clients with the status of their authentication.

As per claim 142, the limitations of a user authentication method for a

communication network having a plurality of nodes, the method comprising:

entering on a first node first user identification information; transmitting to an

authentication agent on a second node communicating with the first node over a

LAN link the first user identification information; relaying from the authentication

agent to an authentication server the first user identification information;

comparing on the authentication server the first user identification information

with user identification information in a database of user identification

information; and transmitting from the authentication server to the authentication

agent, if the first user identification information matches user identification information in the database of user identification information, information notifying the authentication agent that a user on the first node has been authenticated whereupon the authentication agent authorizes transmission on the second node of packets in data flows involving the first node are taught in the Patent (claim 17, col 13 ln 66-67 and col 14 ln 1-20).

Furthermore, the limitation of the agent authorizing transmission on the second node of packets in data flows involving one or more nodes reachable by the first node via the second node is taught in claim 1 of Patent (communicability between the first node and a group of nodes).

The Patent does not claim the limitation of relaying to the first node the notification information. Alexander et al discloses relaying notification information to and from an authentication server to an authentication client (LE_JOIN_RESPONSE, col 2 ln 26-60). One of ordinary skill in the art would have been able to modify the communication network to further relay notification information to the client as part of a data flow. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Alexander et al within the Patent because it would have improved security of the system by providing further information to the client.

As per claim 143, the limitation of the second node inhibiting transmission to any nodes reachable by the first node via the second node of all packets

received from the first node that are not part of an authentication flow are claimed

in claim 32 (second node denies first node access).

As per claim 158, the Patent does not claim a MAC-based authentication

flow between an authentication client on the first node and the authentication

agent. Alexander et al discloses a MAC data flow (layer 2 protocol...Medium

Access Connection, col 1 ln 19-66). One of ordinary skill in the art at the time of

the applicant's invention would have been able to modify the authentication data

flow to include a MAC data flow between the client and agent. It would have

been obvious to one of ordinary skill in the art at the time of the applicant's

invention to combine the teachings of Alexander et al within the limitations of the

Patent because it would have added to the flexibility of using existing

applications. Applications running on a layer 2 protocol such as a MAC are well

known in the art.

14.   Claims 133, and 148-150 are rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent

No. 6,339,830 in view of Alexander et al, US Patent 6,212,191 and in further view of US

Patent 6,070,243.

As per claim 133 and 148-150, claim 17 of US Patent 6,070,243 teaches

the limitation of determining that the user has made a predetermined number of

failed authentication attempts. One of ordinary skill in the art at the time of the applicant's invention would have been able to modify the Patent to further inhibit authentication attempts after a predetermined number of failed authentication attempts as part of the authentication flow. It would have been obvious to one of ordinary skill in the art to the combine the limitations of US Patent 6,070,243 within the Patent because it would have heightened security by preventing unwanted clients from authenticating themselves through trial and error.

Furthermore, the limitation of transmitting information notifying the authentication client that further authentication attempts will be inhibited is not taught by the Patent. Alexander et al discloses sending the client a response notifying the status of the authentication. One of ordinary skill in the art at the time of the applicant's invention would have realized a modification of sending a response back to the client on the status of the authentication procedure. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Alexander et al within the combination of the Patent and US Patent 6,070,243 because it would have increased convenience by providing clients with the status of their authentication.

15.   Claims 131 and 146 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,339,830 in view of Alexander et al, US Patent 6,212,191, and further in view of Wu et al, US Patent 5,774,551

As per claim 131 and 146, claim 20 of the Patent does not claim the

limitation of a logoff request. Wu et al discloses a logoff request from a client (col

19 ln 57-67 and col 20 ln 1-8) One of ordinary skill in the art at the time of the

applicant's invention would have been able to add a logoff request as part of

communication in the network. It would have been obvious to one of ordinary

skill in the art at the time of the applicant's invention to combine the teachings of

Wu et al within the Patent because it would have heightened security by allowing

a client to logoff the communication network so that no unwanted data are able to

be transferred.

16.   Claim 134 is rejected under the judicially created doctrine of obviousness-type

double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,339,830 in

view of Alexander et al, US Patent 6,212,191 and in further view of Wu et al, US Patent

5,774,551.

As per claim 134, the combination of the Patent and Alexander et al

teaches an authentication system as described above. However, the

combination of the Patent and Alexander et al does not teach the packets

transmitted pursuant to the authorization are neither encrypted nor decrypted by

the second node. Wu discloses packets being transmitted are neither encrypted

nor decrypted by the second node after the user is authenticated (abstract and

col 19 ln 45-56). One of ordinary skill in the art at the time of the applicant's

inventions would have been able not to encrypt nor decrypt the packets in a

communication system after the user is authenticated. It would have been

obvious to one of ordinary skill in the art at the time of the applicant's invention to

combine the teachings of Wu et al within the combination of the Patent and

Alexander et al because it would have simplified the communications on the

network through less processing of the unencrypted data.

17.   Claims 135-137, 139-141, 151-152,154-157 and 159-160 are rejected under the

judicially created doctrine of obviousness-type double patenting as being unpatentable

over claim 17 of U.S. Patent No. 6,339,830. Although the conflicting claims are not

identical, they are not patentably distinct from each other because:

As per claim 135, claim limitations of a user authentication method for a

communication network having a plurality of nodes, the method comprising:

entering on a first node first user identification information; transmitting to an

authentication agent on a second node communicating with the first node over a

LAN link the first user identification information; relaying from the authentication

agent to an authentication server the first user identification information;

comparing on the authentication server the first user identification information

with user identification information in a database of user identification

information; and transmitting from the authentication server to the authentication

agent, if the first user identification information matches user identification

information in the database of user identification information, information notifying

the authentication agent that a user on the first node has been authenticated

whereupon the authentication agent authorizes transmission on the second node of packets in data flows involving the first node are taught in the Patent (claim 17, col 13 ln 66-67 and col 14 ln 1-20).

Furthermore, the limitation of authorizing an interface to the LAN link to allow packets in data flows is taught in Patent (claim 24, col 14 ln 58-65).

As per claim 136, the limitations are stated in claim 24 of Patent.

As per claim 137, the limitations are stated in claim 3 of Patent.

As per claim 139, the limitations are stated in claim 20.

As per claim 140, the limitation second node drops all packets received from the first node that are not part of an authentication flow is stated in claim 32 of Patent (second node denies the first node access).

As per claim 141, the limitation the second node drops all packets received from the first node that are not addressed to the authentication agent is stated in claim 32 of Patent (second node denies the first node access).

As per claim 151, the limitations of a user authentication method for a communication network having a plurality of nodes, the method comprising: entering on a first node first user identification information; transmitting to an authentication agent on a second node communicating with the first node over a LAN link the first user identification information; relaying from the authentication agent to an authentication server the first user identification information;

comparing on the authentication server the first user identification information with user identification information in a database of user identification information; and transmitting from the authentication server to the authentication agent, if the first user identification information matches user identification information in the database of user identification information, information notifying the authentication agent that a user on the first node has been authenticated whereupon the authentication agent authorizes transmission on the second node of packets in data flows involving the first node are taught in the Patent (claim 17, col 13 ln 66-67 and col 14 ln 1-20).

Furthermore, the limitation of the packets that are transmitted pursuant to the authorization bypass the authentication agent is state in claim 28 of the Patent (switching link for switching packets...flow between the node and the backbone network).

As per claim 152, the limitations of a user authentication method for a communication network having a plurality of nodes, the method comprising: entering on a first node first user identification information; transmitting to an authentication agent on a second node communicating with the first node over a LAN link the first user identification information; relaying from the authentication agent to an authentication server the first user identification information; comparing on the authentication server the first user identification information with user identification information in a database of user identification

information; and transmitting from the authentication server to the authentication

agent, if the first user identification information matches user identification

information in the database of user identification information, information notifying

the authentication agent that a user on the first node has been authenticated

whereupon the authentication agent authorizes transmission on the second node

of packets in data flows involving the first node are taught in the Patent (claim 17,

col 13 ln 66-67 and col 14 ln 1-20). The limitation of the authentication agent

authorizing transmission on the second node of packets in data flows that are

within the VLAN is stated in claim 40 (nodes share a common VLAN).

Furthermore, the pertaining application claims transmitting information of a

VLAN for which the user has been authenticated is taught in the combination of

Claim 23 of Patent states (transmitting a list of network resources for which the

user is authorized) and claim 15 (network resources are represented by a virtual

local area network).

As per claim 154, the Patent further teaches appending packets

transmitted pursuant to the authorization and transmitted from the second node

to a backbone network in claim 32 (second node provides for the sole interface

between the first node and a LAN backbone).

As per claim 155, the limitation of claim is stated in claim 40 of Patent.

As per claim 156, the limitation of claim is stated in claim 32 of Patent.

As per claim 157, the limitation of claim is stated in claim 40 of Patent.

As per claim 159, the limitation of authorizing an interface to the LAN link to allow packets in data flows are taught in Patent (claim 24, col 14 ln 58-65).

As per claim 160, the limitation of the packets that are transmitted pursuant to the authorization bypass the authentication agent is stated in claim 28 of the Patent (switching link for switching packets... flow between the node and the backbone network).

18.   Claims 138 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,339,830 in view of Willens, US Patent 5,889,958.

As per claim 138, the Patent does not further teach the authentication server being a RADIUS server. Willens discloses the use of a RADIUS server for authentication of clients in a communications network (abstract). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Willens within the system of the Patent because it would have improved efficiency by allowing the system to adopt a policy that can be applied at a single administered network point.

19.   Claim 144 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,339,830 in view of Alexander et al, US Patent 6,212,191, and further in view of Zenchelsky et al, US Patent 6,233,686.

As per claim 144, the limitation of the second node inhibiting transmission to any nodes reachable by the first node via the second node of all packets received from the first node claimed in claim 32 (second node denies first node access). Zenchelsky et al discloses an authentication system that drops packets depending on their source and destination address (col 2 ln 42-51). One of ordinary skill in the art at the time of the applicant's invention would have realized the use of the filter in Zenchelsky et al's teachings for filtering packets in a communications network. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Zenchelsky et al within the claims of the Patent because it would have created more bandwidth in the network by dropping unnecessary packets.

20.   Claim 153 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of U.S. Patent No. 6,339,830 in view of Alexander et al US Patent 6,212,191.

As per claim 153, the Patent discloses information notifying the authentication agent that the user on the first node has been authenticated in claim 17 of Patent, and information identifying a VLAN in claim 13 of Patent (virtual local area network identifier) and transmitting information from the authentication server to the authentication agent in claim 17 of Patent. However, the Patent does not teach transmitting information in the same packet. Alexander et al discloses sending information on the status of the authentication

and information on the identification information of the network in one packet
(LE_CONFIGURE_RESPONSE indicates a success and a Target ATM Address,
col 5 ln 42-65). A VLAN identifier identifies the network of the node. The ATM
address also identifies the location of a node on a network. One of ordinary skill
in the art at the time of the applicant's invention would have realized that a VLAN
identifier can be substituted for the ATM address in the response packet of
Alexander et al's disclosure. It would have been obvious to one of ordinary skill
in the art at the time of the applicant's invention to combine the teachings of
Alexander et al within the claims of the Patent because it would have decreased
the amount of communication between the server and agent and therefore
relieve the bandwidth in the network.

Conclusion

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Allen S. Wu whose telephone number is 703-305-0708.
The examiner can normally be reached on Monday-Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the
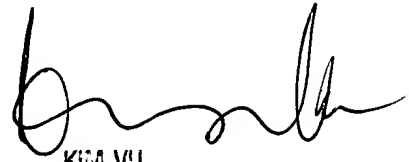organization where this application or proceeding is assigned is N/A.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is 703-305-
0900.

Allen S. Wu
Examiner
Art Unit 2135

ASW

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100